

THAT WHICH IS CLAIMED:

1. A method for removing at least one of a plurality of removable linear laser diode bars from a laser diode array, comprising:

5 accessing a removable linear laser diode bar within the laser diode array, wherein the laser diode array comprises the plurality of removable linear laser diode bars and a plurality of spacers with each removable linear laser diode bar being disposed between a respective pair of spacers;

10 slideably removing the removable linear laser diode bar from between the respective pair of spacers in the laser diode array without breaking a mechanical connection between the removable linear laser diode bar and the respective pair of spacers; and

15 maintaining a predetermined spaced apart relationship between the respective pair of spacers to facilitate subsequent insertion of a replacement linear laser diode bar.

2. The method for removing at least one removable linear laser diode bar according to claim 1, wherein accessing the removable linear laser diode bar comprises opening a housing in which the laser diode array is disposed prior to
20 slideably removing the removable linear laser diode bar.

3. The method for removing at least one removable linear laser diode bar according to claim 2, wherein the laser diode array is immersion cooled, and wherein the method further comprises at least partially draining a liquid coolant from the
25 housing prior to opening the housing.

4. The method for removing at least one removable linear laser diode bar according to claim 1, wherein slideably removing the removable linear laser diode bar from between the respective pair of spacers comprises applying a force to the
30 removable linear laser bar in a direction away from the plurality of spacers.

5. The method for removing at least one removable linear laser diode bar according to claim 4, wherein applying the force comprises overcoming a frictional force between the removable linear laser diode bar and the respective pair of spacers.